

PLASMA PROCESSING APPARATUS AND CONTROL METHOD

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ABSTRACT OF THE DISCLOSURE

10 A detector detects microwaves reflected from a  
processing chamber. Based on the reflected microwaves, a  
load impedance is calculated. An amount of adjustment  
required to match the load impedance with an impedance of  
a microwave oscillator is calculated. The calculated  
amount of adjustment multiplied by a predetermined value  
smaller than 1 is transmitted as an adjustment signal. A  
15 load matching device is repeatedly controlled based on  
the adjustment signal. Consequently, the load impedance  
gradually approaches the impedance of the oscillator.  
Eventually, an impedance match is attained.